Environmental Taxes, 1981–85

By Rashida Belal*

Through the implementation of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), Congress intended to amass a $1.6 billion Hazardous Substance Response Trust Fund, more commonly referred to as the "Superfund". Of this amount, $1.4 billion was to be raised through a special environmental excise tax. From April 1981 through September 1985, when the original Act expired, approximately $1.2 billion in environmental taxes was reported to the Internal Revenue Service by 1,077 taxpayers. CERCLA 1980 was extended and amended, effective January 1987.

BRIEF HISTORY OF THE SUPERFUND LEGISLATION

Hazardous chemical waste problems have evolved from the production of such everyday products as plastics, paints, adhesives, fertilizers, detergents, cosmetics, pesticides, and toiletries. Toxic chemicals are also used in the production of metals, petroleum products, glass, and mirrors.

Improper hazardous waste disposal can result in catastrophic situations including contamination of groundwater (the source of half the Nation's drinking water), habitat destruction, health-related problems, soil contamination, livestock loss, and crop damage [1].

To deal with the problems of hazardous water, the Administration recommended the establishment of a "Superfund" in June 1979. The legislation was enacted in December 1980.

Although the average tax liability was $1.1 million per taxpayer, the lion's share of the total tax was attributable to five companies, each of which reported more than $50 million in tax. From April 1981 through September 1985, these companies contributed $382 million, almost 33 percent of the total tax, an average of more than $76 million per company. The top 14 companies, those companies that reported over $20 million in tax, were responsible for $636 million, more than half of the total tax liability.

Originally, Superfund was expected to accumulate $1.4 of the $1.6 billion in taxes levied against petroleum, inorganic chemicals, and petrochemicals. The tax rates for each were formulated so that the tax liability would reflect the respective percentages in which these substances were found in hazardous waste sites [2]. The remaining $0.22 billion was to be appropriated from general tax revenues at a rate of $44 million per year for each of Fiscal Years 1981 through 1985. In addition, liable parties would be obliged to reimburse the Fund for Government clean-up costs and punitive damages in responding to an environmental emergency involving a release or threatened release of hazardous substances.

Monies in the Superfund were available for expenditures incurred under section III of CERCLA, which costs included but were not limited to the following: 1) costs of responding to the presence of hazardous substances on land or in the water or air, including clean-up and removal of such substances and remedial action; 2) payment of claims for injury to, or destruction or loss of, natural resources belonging to or controlled by the Federal or State Governments; and 3) certain costs related to response, including damage assessments, epidemiological studies, and maintenance of emergency response forces.

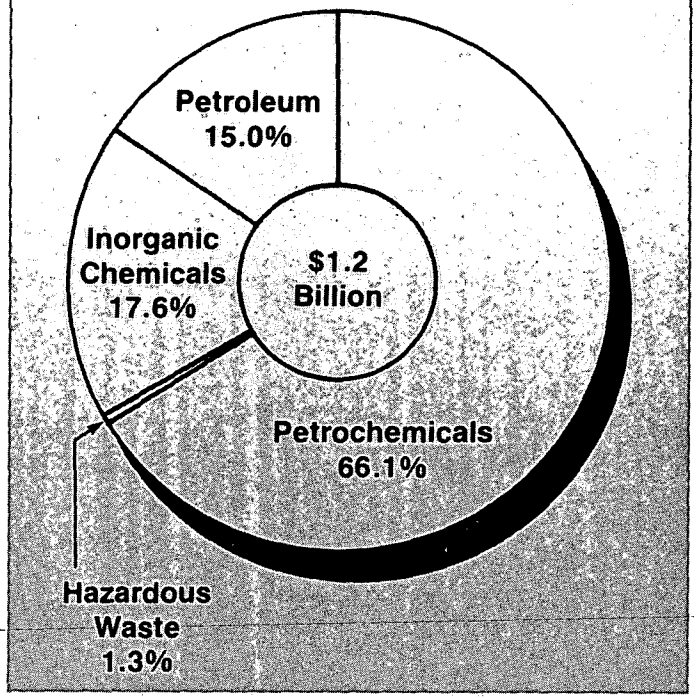
CERCLA also established the Post-closure Liability Trust Fund, supported by a tax imposed on hazardous waste which was received at a qualified hazardous waste disposal facility and which was to remain at the facility after its closure. This Fund was to assume completely the responsibility of owners and operators of closed hazardous waste disposal facilities that met certain conditions. Since December 1983 (the first quarter of its existence) through September 1985, approximately $16 million in tax liability was reported.

The percentage of environmental tax attributable to the various taxable substances remained basically the same throughout the lifetime of CERCLA. As shown in Figure A, for the quarters ended June 1981 through September 1985

*Foreign Special Projects Section. Prepared under the direction of Michael Alexander, Chief.

Figure A

Sources of Environmental Taxes, Quarters Ended June 30, 1981, Through September 30, 1985



(the lifetime of the taxes) petrochemicals accounted for two-thirds of total environmental taxes. Inorganic chemicals accounted for nearly 18 percent of the total. Just under 15 percent of the reported tax was on petroleum. The hazardous waste tax was just over 1 percent of the total environmental taxes. Figure B shows the number of taxpayers reporting environmental taxes and the average tax accrued per tax category.

Figure B.—Number of Businesses and Environmental Taxes, Quarters Ended June 1981 through September 1985

[Money amounts are in thousands of dollars]

Type of tax	Number of businesses[1]	Total tax	Average tax
	(1)	(2)	(3)
Total environmental taxes	1,077	$1,181,792	$1,097
Superfund	n.a.	$1,166,231	n.a.
Petroleum	481	176,911	368
Petrochemicals	264	780,845	2,958
Inorganic chemicals	439	208,424	475
Unallocable	119	51	*
Post-closure Liability Trust Fund	130	15,561	120

n.a. - not available
* Less than $500
[1] Detail in column (1) may not add to any meaningful total because businesses may report more than one type of tax.

PETROLEUM

CERCLA imposed an excise tax of $.0079 per barrel on crude oil received at a U.S. refinery and petroleum products which entered into the United States for consumption, use, or warehousing. Approximately 45 percent of the total businesses reporting environmental taxes reported a tax on petroleum. The 481 companies that reported tax on petroleum reported a total tax of $176.9 million, an average of about $368,000 in tax per company over the 18 quarters that CERCLA was in effect.

PETROCHEMICALS

Eleven petrochemicals were taxed under CERCLA, all but one at the rate of $4.87 per ton. Although petrochemicals were reported by only one-fourth of the companies reporting an environmental tax, they accounted for 66 percent of the total environmental tax liability, yielding the highest average tax per category, nearly $3.0 million per taxpayer. This amount was more than 2.5 times the overall average tax. Over the 1981-85 period, petrochemicals generated a total of $780.8 million in tax liability on the part of 264 companies.

Ethylene, the highest revenue producing petrochemical, was reported by 47 companies for a total of over $311 million in tax. This was approximately 40 percent of the total tax on petrochemicals. However, the tax reported for benzene, propylene, xylene, plus ethylene amounted to over $627 million or 80 percent of the total tax liability for petrochemicals.

INORGANIC CHEMICALS

CERCLA imposed a tax on 31 inorganic chemicals at rates varying from $0.22 to $4.45 per ton. A total of $208.4 million in tax liability was reported by 439 taxpayers for an average of $475,000 per taxpayer. Although more than 40 percent of the businesses reporting an environmental tax liability paid a tax on inorganic chemicals, the total amount of tax liability accrued was less than 18 percent of the total tax.

Sulfuric acid was the most frequently reported inorganic chemical, with 114 taxpayers reporting a tax. The $10.5 million in tax liability represented 5 percent of the tax reported for all inorganic chemicals. Chlorine, reported by only 57 businesses, accounted for more than half of the inorganic chemical tax liability and almost 10 percent of the total environmental tax.

HAZARDOUS WASTE

The Post-closure Liability Trust Fund amassed $15.6 million from 130 businesses during its lifetime from October

1983 through September 1985. For the entire period that this tax was in effect, the average tax reported was $119,697.

SUMMARY

Figure C.—"Superfund" Taxes by Category, Quarters Ended June 1981 through September 1985

[Millions of dollars]

Quarter ended	Total[1]	Petro-chemicals	Inorganic chemicals	Petroleum
	(1)	(2)	(3)	(4)
All quarters	$1,166.2	$780.8	$208.4	$176.9
June 1981	69.1	46.1	12.8	10.2
Sept. 1981	61.6	40.1	12.0	9.4
Dec. 1981	68.1	45.2	11.4	11.6
Mar. 1982	59.2	39.6	10.6	9.0
June 1982	60.8	40.1	10.8	9.9
Sept. 1982	55.4	36.3	9.8	9.4
Dec. 1982	56.8	37.3	10.1	9.4
Mar. 1983	59.4	40.0	10.6	8.8
June 1983	66.8	45.4	11.3	10.2
Sept. 1983	63.8	42.7	11.3	9.9
Dec. 1983	66.8	45.3	11.6	9.9
Mar. 1984	74.9	52.2	12.4	10.2
June 1984	72.8	49.5	12.7	10.6
Sept. 1984	64.3	43.1	11.5	9.7
Dec. 1984	60.3	38.5	12.9	8.9
Mar. 1985	65.6	44.2	11.9	9.5
June 1985	70.2	48.0	12.4	9.8
Sept. 1985	69.3	47.2	12.1	10.0

[1] Includes taxes not allocable to a specific category. For this reason and also because of rounding, detail will not add to total.

As shown in Figure C, there was virtually no difference in the reported tax liability for the quarters ended June 1981 and September 1985, the respective beginning and ending quarters of Superfund. And observing the table on a quarter-to-quarter basis does not yield a pattern of increases or decreases. However, by looking at the larger picture, it is evident that reported tax liability increased each year, but on a declining basis. This held true up to 1985.

Nineteen eighty-one was a partial year, but from 1982 to 1983 the reported tax increased by 10 percent. From 1983 to 1984 there was an increase of only 6 percent.

Comparing the last year, 1985, to the first year of Superfund, 1981, it appears that the tax went full circle. Both years were reduced to 3 reporting quarters and the difference in tax between the 2 years was only 3 percent, with 1985 being the higher of the 2 years.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) established the Superfund as of April 1981; it expired on September 30, 1985, but was extended and amended as of January 1987. Congress intended to amass a $1.6 billion "Superfund", with $1.4 billion accumulated through taxes levied against petroleum, inorganic chemicals and petrochemicals. Another $0.22 billion was scheduled to be transferred to the Superfund from general tax revenues. Before its initial expiration, CERCLA resulted in a total of $1.2 billion in environmental taxes being reported by 1,077 taxpayers. Almost one-third of the total tax, $381,712,710, was attributed to five companies that had average tax liabilities of over $76 million.

CERCLA also contained provisions for the Post-closure Liability Trust Tax, a tax levied on hazardous waste received at a qualified hazardous waste disposal facility and which was to remain at the facility after its closure. This portion of CERCLA, which did not go into effect until December 1983, amassed approximately $16 million in tax liability.

For additional information on Environmental Taxes, see the Fall 1982, Fall 1983, Spring 1985 and Spring 1986 issues of the SOI Bulletin [3].

DATA SOURCES AND LIMITATIONS

Environmental taxes, which are excise taxes, are reported on Form 720, the Quarterly Excise Tax Return. Form 6627, Environmental Taxes, is the form on which the tax liability for petroleum, chemicals and hazardous waste is computed. The tax as imposed by Congress was levied at different rates ranging from $.0079 per barrel of crude oil or petroleum and from $0.22 to as much as $4.87 per ton of certain chemicals, as shown in Table 1.

Returns are due to be filed 1 month after the end of the quarter in which the business is liable for environmental taxes. These returns are the source of data for this study. Data in this article reflect information reported on returns filed for the quarters ending June 30, 1981, through September 30, 1985.

Any adjustments, credits, or refunds to environmental taxes reported or claimed either on the Form 720 or on a Form 843, Claim, are not reflected in the data. A taxpayer could take an adjustment or credit if a taxed chemical was later used to manufacture or produce any other substance subject to the tax. If a tax were paid on a chemical subsequently used to produce fertilizer, a credit or adjustment could also be claimed.

The Internal Revenue Service also releases environmental tax statistics in a quarterly report on excise taxes [4]. These figures, taken from the Form 720, show the total tax liability, after adjustment, on returns recorded on the computerized Business Master File as part of routine tax administration processing. There is, however, no distribution of this tax by type of chemical. Returns are due 1 month after the end of the calendar quarter and are reflected in the statistics for the quarter in which they are filed (and processed). Also included are returns filed late because of routine filing extensions and other reasons. Therefore, that report covers whatever tax was recorded during a quarter, regardless of when it was incurred. Consequently, the two series of data are not directly comparable.

Since no statistical sampling was involved, the data presented here are not subject to sampling error, but may be subject to nonsampling error. Although efforts were made to secure missing returns, some returns from previous quarters were substituted because of time and resource constraints. All tables have been revised and in some cases a decrease in the previously-reported tax liability is evident. This was because returns previously unavailable for the statistics were finally obtained and the tax reported was less than the tax on the previous quarter's return that had been used. In some cases where the previous quarter's return was used, it was later determined that the taxpayer had no tax liability at all for the particular quarter in question.

NOTES AND REFERENCES

[1] Gennett, David, "Handling Hazardous Waste, An Unsolved Problem," *Environment,* October 1980, p. 7.

[2] U.S. Senate, *Report of the Committee on Finance on S.51,* Report 99-73, May 23, 1985.

[3] For prior years see Barnhardt, Janet, "Superfund for Environmental Taxes," *Statistics of Income Bulletin, Fall 1982,* pp. 31-34; Belal, Rashida, "Superfund for Environmental Taxes, 1981 and 1982," *Statistics of Income Bulletin,* Fall 1983, pp. 31-34; "Environmental Taxes 1981-83," *Statistics of Income Bulletin,* Spring 1985 pp. 61-67; "Environmental Taxes, 1981-84," *Statistics of Income Bulletin,* Spring 1986, pp. 72-82.

[4] U.S. Department of the Treasury, Internal Revenue Service, *Internal Revenue Report of Excise Taxes,* issued quarterly.

Table 1.—Environmental Taxes Reported by Type of Substance, Quarters Ended June 1981–September 1985

[Money amounts are in thousands of dollars except in column 1]

Type of substance	Total	Quarter ended				
		June r1981	Sept. r1981	Dec. r1981	Mar. r1982	June r1982
	(1)	(2)	(3)	(4)	(5)	(6)
Total	1,181,791,773	69,105	61,562	68,130	59,189	60,824
Petroleum	176,911,431	10,177	9,398	11,611	9,016	9,885
Petrochemicals, total	780,844,630	46,094	40,116	45,163	39,577	40,105
Acetylene	2,812,297	206	236	188	120	136
Benzene	102,253,046	5,360	4,225	5,665	4,558	4,543
Butane	15,687,480	1,394	1,088	1,050	1,020	1,218
Butylene	18,867,029	1,469	1,351	1,442	1,141	1,212
Butadiene	31,687,803	1,832	1,483	2,015	1,498	1,685
Ethylene	311,316,071	17,024	15,215	15,969	15,293	15,881
Methane	32,690,539	2,479	2,264	2,309	2,031	2,004
Naphthalene	1,364,869	139	65	93	99	53
Propylene	140,889,280	9,510	7,950	7,891	7,994	6,889
Toluene	50,536,576	2,598	2,354	2,899	1,973	2,143
Xylene	72,739,636	4,103	3,883	5,643	3,850	4,343
Inorganic chemicals, total	208,424,089	12,832	12,031	11,354	10,596	10,830
Ammonia	39,157,699	2,295	2,143	2,191	2,118	2,059
Antimony	54,306	4	2	2	2	2
Antimony trioxide	356,215	15	17	24	20	17
Arsenic	15,987	1	(1)	1	1	1
Arsenic trioxide	268,402	21	23	23	22	19
Barium sulfide	247,550	*	*	3	(1)	*
Bromine	3,647,545	205	157	206	149	187
Cadmium	60,098	3	2	3	3	2
Chlorine	111,961,899	7,099	6,513	5,791	5,540	5,682
Chromium	392,494	76	36	25	27	10
Chromite	2,563,313	116	182	247	80	81
Potassium dichromate	1,102	*	*	*	(1)	*
Sodium dichromate	303,859	*	17	*	2	1
Cobalt	120,921	3	4	11	8	6
Cupric sulphate	265,056	10	17	11	11	12
Cupric oxide	126,699	4	3	4	7	4
Cuprous oxide	66,751	3	4	4	4	4
Hydrochloric acid	2,414,781	90	119	213	150	142
Hydrogen flouride	5,244,251	328	337	238	259	274
Lead oxide	6,540,030	366	336	393	330	324
Mercury	41,112	2	2	2	2	6
Nickel	2,379,743	121	157	156	164	125
Phosphorus	7,389,851	494	423	420	409	407
Stannous chloride	19,767	*	*	2	1	1
Stannic chloride	76,729	1	1	11	4	5
Zinc chloride	232,065	15	13	15	12	15
Zinc sulfate	241,098	18	13	15	16	16
Potassium hydroxide	299,270	15	13	16	12	14
Sodium hydroxide	11,849,542	713	693	650	602	599
Sulfuric acid	10,520,383	703	706	605	572	750
Nitric acid	1,565,553	101	93	74	68	67
Unallocable chemicals	50,963	2	16	2	(1)	3
Hazardous waste	15,560,658	(2)	(2)	(2)	(2)	(2)

Footnote(s) at end of table.

Table 1.—Environmental Taxes Reported by Type of Substance, Quarters Ended June 1981–September 1985—Continued

[Money amounts are in thousands of dollars]

Type of substance	Quarter ended—continued					
	Sept. r1982	Dec. r1982	Mar. r1983	June r1983	Sept. r1983	Dec. r1983
	(7)	(8)	(9)	(10)	(11)	(12)
Total	55,450	56,799	59,403	66,894	63,812	69,653
Petroleum	9,362	9,373	8,774	10,155	9,858	9,921
Petrochemicals, total	36,269	37,313	39,969	45,406	42,655	45,300
Acetylene	112	*	*	*	132	*
Benzene	5,164	4,350	4,925	5,888	5,196	6,681
Butane	834	728	721	557	704	434
Butylene	737	949	928	1,103	683	809
Butadiene	1,413	1,337	1,742	1,745	1,658	1,833
Ethylene	15,404	16,680	16,819	17,890	18,011	17,497
Methane	1,765	1,666	1,633	1,647	1,722	1,760
Naphthalene	88	*	*	*	68	*
Propylene	6,144	5,587	7,049	7,752	7,455	7,878
Toluene	2,003	2,193	2,620	4,834	3,156	3,755
Xylene	2,606	3,640	3,341	3,787	3,870	4,403
Inorganic chemicals, total	9,809	10,114	10,645	11,288	11,299	11,608
Ammonia	1,980	1,663	1,901	2,027	2,067	2,147
Antimony	2	1	4	3	3	3
Antimony trioxide	13	13	17	18	17	22
Arsenic	1	(1)	(1)	(1)	4	3
Arsenic trioxide	16	12	10	15	5	8
Barium sulfide	*	*	*	2	1	1
Bromine	179	388	189	198	186	200
Cadmium	2	2	4	3	2	1
Chlorine	5,108	5,589	5,735	6,130	6,071	6,235
Chromium	8	7	11	13	10	10
Chromite	90	118	108	77	59	96
Potassium dichromate	(1)	(1)	*	(1)	(1)	*
Sodium dichromate	*	1	2	2	234	3
Cobalt	3	8	9	8	7	4
Cupric sulphate	25	10	20	21	17	11
Cupric oxide	6	4	7	7	7	7
Cuprous oxide	3	*	4	5	4	4
Hydrochloric acid	115	131	152	174	132	142
Hydrogen flouride	220	204	255	280	261	270
Lead oxide	322	267	304	339	345	413
Mercury	4	(1)	(1)	(1)	2	2
Nickel	62	96	152	156	74	163
Phosphorus	384	380	404	428	336	414
Stannous chloride	1	*	2	1	(1)	1
Stannic chloride	4	3	5	5	1	6
Zinc chloride	10	11	16	14	10	12
Zinc sulfate	10	3	20	13	10	12
Potassium hydroxide	10	12	68	12	13	15
Sodium hydroxide	543	522	580	624	826	661
Sulfuric acid	599	584	578	619	515	637
Nitric acid	87	80	87	93	79	103
Unallocable chemicals	10	11	15	(1)	(1)	(1)
Hazardous waste	—	—	—	—	—	1,825

Footnote(s) at end of table.

Table 1.—Environmental Taxes Reported by Type of Substance, Quarters Ended June 1981–September 1985—Continued

[Money amounts are in thousands of dollars]

Type of substance	Quarter ended—continued						
	Mar. r1984	June r1984	Sept. r1984	Dec. r1984	Mar. 1985	June 1985	Sept. 1985
	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Total	76,370	75,390	66,643	62,503	67,432	71,786	70,770
Petroleum	10,202	10,556	9,671	8,873	9,548	9,785	10,032
Petrochemicals, total	52,237	49,466	43,067	38,549	44,169	47,953	47,160
Acetylene	*	*	156	182	167	176	148
Benzene	7,566	7,236	6,040	5,552	6,047	6,293	6,922
Butane	605	798	470	550	776	2,173	586
Butylene	791	1,088	1,108	1,167	870	1,046	936
Butadiene	1,953	2,030	1,905	1,742	1,945	1,857	2,014
Ethylene	21,081	19,876	16,915	15,317	17,774	19,681	18,990
Methane	1,847	1,928	1,974	1,658	1,320	1,378	1,307
Naphthalene	*	*	61	66	61	64	66
Propylene	10,028	8,641	8,027	6,586	8,027	8,202	9,086
Toluene	4,013	3,182	2,929	1,938	2,945	2,310	2,690
Xylene	4,125	4,449	3,482	3,791	4,237	4,773	4,414
Inorganic chemicals, total	12,423	12,741	11,543	12,925	11,868	12,423	12,095
Ammonia	2,326	2,477	2,195	2,738	2,208	2,288	2,335
Antimony	6	4	3	4	2	4	3
Antimony trioxide	27	31	22	19	23	20	20
Arsenic	1	1	(1)	(1)	1	(1)	(1)
Arsenic trioxide	12	15	12	11	11	17	16
Barium sulfide	222	2	1	*	*	1	*
Bromine	201	214	206	218	226	182	156
Cadmium	10	14	2	2	2	2	2
Chlorine	6,484	6,095	6,189	7,011	6,670	7,068	6,959
Chromium	10	12	10	9	14	68	36
Chromite	72	791	75	96	102	111	61
Potassium dichromate	1	(1)	(1)	*	*	(1)	*
Sodium dichromate	2	3	2	1	9	9	1
Cobalt	11	12	8	4	5	4	5
Cupric sulphate	18	19	14	12	16	11	8
Cupric oxide	10	9	10	7	10	13	9
Cuprous oxide	5	4	3	*	5	5	3
Hydrochloric acid	168	148	145	124	118	95	58
Hydrogen flouride	342	394	338	291	308	344	304
Lead oxide	451	389	395	427	390	381	368
Mercury	3	2	2	2	1	(1)	9
Nickel	140	158	121	150	138	141	106
Phosphorus	429	430	391	426	398	436	380
Stannous chloride	2	1	1	1	1	1	1
Stannic chloride	4	6	5	4	6	2	6
Zinc chloride	15	15	12	11	12	12	13
Zinc sulfate	19	14	12	12	15	14	10
Potassium hydroxide	16	18	13	14	14	10	13
Sodium hydroxide	684	710	701	721	661	667	693
Sulfuric acid	627	656	575	513	416	434	430
Nitric acid	105	96	81	92	86	84	92
Unallocable chemicals	(1)	2	(1)	(1)	(1)	(1)	(1)
Hazardous waste	1,508	2,625	2,361	2,157	1,847	1,625	1,483

*This figure is not shown to avoid disclosure of information for specific businesses. However, the data are included in the appropriate totals.

[1] Less than $500, however, the data are included in the totals.

[2] Tax not in effect until October 1, 1983.

NOTE: Detail may not add to total because of rounding.

Table 2.—Environmental Taxes Reported by Type of Substance, Aggregate for The Quarters Ended June 1981–September 1985

Type of substance	Number of businesses[1]	Number of tons (000's)	Tax rate per ton (dollars)	Average tax per business (dollars)
	(1)	(2)	(3)	(4)
Petroleum	481	22,393,852[2]	.0079[3]	367,799
Petrochemicals, total	264	N/A	N/A	2,957,744
Acetylene	55	577	4.87	51,132
Benzene	70	20,997	4.87	1,460,757
Butane	41	3,221	4.87	382,621
Butylene	29	3,874	4.87	650,587
Butadiene	36	6,507	4.87	880,216
Ethylene	47	63,925	4.87	6,623,746
Methane	37	9,503	3.44	883,528
Naphthalene	10	280	4.87	136,486
Propylene	60	28,930	4.87	2,348,154
Toluene	114	10,377	4.87	443,303
Xylene	92	14,936	4.87	790,648
Inorganic chemicals, total	439	N/A	N/A	474,770
Ammonia	109	14,832	2.64	359,244
Antimony	23	12	4.45	2,361
Antimony trioxide	32	95	3.75	11,131
Arsenic	16	4	4.45	999
Arsenic trioxide	21	79	3.41	12,781
Barium sulfide	6	108	2.30	41,258
Bromine	10	820	4.45	364,754
Cadmium	31	14	4.45	1,938
Chlorine	57	41,467	2.70	1,964,243
Chromium	23	88	4.45	17,064
Chromite	21	1,686	1.52	122,062
Potassium dichromate	7	1	1.69	157
Sodium dichromate	14	162	1.87	21,704
Cobalt	31	27	4.45	3,900
Cupric sulfate	37	142	1.87	7,163
Cupric oxide	21	35	3.59	6,033
Cuprous oxide	8	17	3.97	8,343
Hydrochloric acid	94	8,327	.29	25,689
Hydrogen flouride	22	1,240	4.23	238,375
Lead oxide	42	1,580	4.14	155,715
Mercury	13	9	4.45	3,162
Nickel	33	534	4.45	72,113
Phosphorus	14	1,661	4.45	527,846
Stannous chloride	8	7	2.85	2,470
Stannic chloride	10	36	2.12	7,672
Zinc chloride	24	105	2.22	9,669
Zinc sulfate	27	127	1.90	8,929
Potassium hydroxide	28	1,360	.22	10,688
Sodium hydroxide	86	42,320	.28	137,785
Sulfuric acid	114	40,463	.26	92,284
Nitric a cid	46	6,523	.24	34,033
Unallocable chemicals	119	n.a.	n.a.	428
Hazardous waste	130	7,305	2.13	119,697

n.a. - not available.
N/A - Not applicable.
[1] Detail in column 1 may not add to any meaningful total because businesses may report more than one of the indicated substances.
[2] Number of barrels.
[3] Rate per barrel.
NOTE: Detail may not add to total because of rounding.